

Title (en)

METHODS FOR DESIGNING AND PREPARING VACCINES COMPRISING DIRECTED SEQUENCE POLYMER COMPOSITIONS VIA THE DIRECTED EXPANSION OF EPITOPES

Title (de)

VERFAHREN ZUR KONSTRUKTION UND HERSTELLUNG VON IMPFSTOFFEN MIT GEZIELTEN SEQUENZPOLYMER-ZUSAMMENSETZUNGEN DURCH GEZIELTE EXPANSION VON EPITOPEN

Title (fr)

PROCÉDÉS DE CONCEPTION ET DE PRÉPARATION DE VACCINS COMPRENANT DES COMPOSITIONS DE POLYMÈRES À SÉQUENCES DIRIGÉES VIA L'EXPANSION DIRIGÉE D'ÉPITOPE

Publication

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Application

**EP 08839500 A 20081016**

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Abstract (en)

[origin: WO2009051797A1] The instant invention comprises a process of preparing a composition comprising directed sequence polymer (DSP) mixtures that act as epitopes and useful as vaccines, such DSP synthesized according to a set of rules regarding the identity and the frequency of occurrence of amino acids that substitute a base or native amino acid of a known epitope. The resulting composition is a mixture of related peptides for therapeutic use as a vaccine, preferably for infectious agents that are immune evasive.

IPC 8 full level

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CPC (source: EP KR US)

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**C07K 1/047** (2013.01 - EP US); **C07K 14/005** (2013.01 - EP KR US); **A61K 39/00** (2013.01 - EP US); **C12N 2760/16122** (2013.01 - EP US);  
**C12N 2760/16134** (2013.01 - EP US); **Y02A 50/30** (2018.01 - EP US)

Citation (examination)

- US 2006194725 A1 20060831 - RASMUSSEN JAMES [US], et al
- WO 2007120834 A2 20071025 - PEPTIMMUNE INC [US], et al
- GRAS-MASSE ET AL: "Convergent peptide libraries, or mixotopes, to elicit or to identify specific immune responses", CURRENT OPINION IN IMMUNOLOGY, ELSEVIER, OXFORD, GB, vol. 11, no. 2, 1 April 1999 (1999-04-01), pages 223 - 228, XP005574704, ISSN: 0952-7915, DOI: 10.1016/S0952-7915(99)80038-7
- P. PINCHUCK ET AL: "ANTIGENICITY OF POLYPEPTIDES (POLY ALPHA AMINO ACIDS): XVI. GENETIC CONTROL OF IMMUNOGENICITY OF SYNTHETIC POLYPEPTIDES IN MICE", THE JOURNAL OF EXPERIMENTAL MEDICINE, vol. 122, no. 4, 1 October 1965 (1965-10-01), US, pages 673 - 679, XP055457359, ISSN: 0022-1007, DOI: 10.1084/jem.122.4.673
- LARKE NATASHA ET AL: "Combined single-clade candidate HIV-1 vaccines induce T cell responses limited by multiple forms of in vivo immune interference", EUROPEAN JOURNAL OF IMMUNOLOGY,, vol. 37, no. 2, 1 February 2007 (2007-02-01), pages 566 - 577, XP002461996, ISSN: 0014-2980, DOI: 10.1002/EJI.200636711
- HERNANDEZ H J & STADECKER M J: "Elucidation and role of critical residues of immunodominant peptide associated with T cell-mediated parasitic disease", THE JOURNAL OF IMMUNOLOGY, THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS, US, vol. 163, 1 October 1999 (1999-10-01), pages 3877 - 3882, XP002157914, ISSN: 0022-1767
- See also references of WO 2009051797A1

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AU 2008311897 B2 20150326; BR PI0817682 A2 20150407; CA 2709679 A1 20090423; EP 2207566 A1 20100721; EP 2586460 A1 20130501;  
IL 205171 A0 20101130; IL 205171 A 20161031; KR 101751406 B1 20170627; KR 20100096092 A 20100901; KR 20170075026 A 20170630;  
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DOCDB simple family (application)

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NZ 58536708 A 20081016; US 28834508 A 20081016; ZA 201003480 A 20100517